

November 9, 2009

TO:

Transportation Authority of Marin Executive Committee

FROM:

Dianne Steinhauser, Executive Director

THROUGH: Bill Whitney, Project Manager

RE:

Highway 101 Greenbrae/ Twin Cities Corridor Improvements – Status Update and Recommendations for the Environmental Scoping Phase, (Action) Agenda Item 6

Dear Commissioners:

## **Executive Summary**

On September 17, 2009 the Department of Transportation (Caltrans) released the Notice of Preparation of a Draft Environmental Impact Report for the Greenbrae/Twin Cities Corridor Improvement Project. After over three years of an intensive effort to identify and screen a series of multi-modal improvement options, we have now formally begun the environmental analysis. Caltrans, acting as lead agency for the environmental review, will continue to accept scoping comments until November 30<sup>th</sup>. Comments will be evaluated as part of the environmental analysis and preparation of the draft environmental document.

As you may recall, on October 23, 2008 the TAM Board adopted the conclusion of the context sensitive design effort that supported a southbound and a northbound improvement option as the preferred improvement options to be carried forward. While staff continues to generally recommend this conclusion, recent input from the Town of Corte Madera and the City of Larkspur indicate a need for the TAM Board to consider their comments.

In November the Larkspur and Corte Madera Council's will be considering formal comments for submission to Caltrans as part of the scoping process. Based on the draft Resolution from Corte Madera (October 6<sup>th</sup>) and verbal direction to the Town Manager (October 20<sup>th</sup>) Corte Madera has refined their position on the improvement options. Considering certain elements of the proposed southbound improvements are deemed unacceptable to the Town, staff proposes a review of the latest recommendations and consideration of appropriate response to those comments. Staff will also present comments from the City of Larkspur.

Staff will be recommending adjustments to the project scope in response to comments from the two local jurisdictions. Staff will continue to coordinate with Caltrans to evaluate all comments received from all parties.

Recommendation: Staff recommends that the TAM Board take the following actions relative to the environmental scoping phase: 1) Confirm and consider modifying previous actions of the TAM Board that adopts the conclusion of the Context Sensitive Design efforts, 2) Accept scoping comments from the City of Larkspur and the Town of Corte Madera, and 3) Provide direction to Caltrans on the scope of the environmental document alternatives in response to comments received from the Town of Corte Madera and City of Larkspur.

# **History**

For many years the communities in central Marin County have been increasingly affected by the congestion on Highway 101 and its decreased operational functionality. Travel times—as well as user safety—have been negatively impacted for commuters traveling within the County, as well as for commuters passing through the County. As the operational efficiencies of Highway 101 continue to decline, congestion continues to worsen, negatively affecting the surrounding circulation patterns on local roads and impacting businesses and residential communities.

Of particular concern in the Greenbrae/Twin Cities Corridor is the closely spaced on- and off-"hook" ramps and the "weaving" patterns of vehicles accessing these ramps. This non-standard and out dated condition has existed for over fifty years. Given the current traffic volumes and forecasted increase in traffic volumes it has become an operational and safety challenge.

At the request of the City of Larkspur, the Congestion Management Agency (now TAM) commissioned a study of the Greenbrae Interchange to investigate and propose alternatives to increase operational efficiency and traveler safety in the area. The 2002 study investigated the transportation system in this area and proposed seven alternatives for further study. The City of Larkspur and the Town of Corte Madera held a joint meeting in March of 2003 and unanimously passed a resolution supporting a preferred alternative, encouraged further study of the entire corridor, and requested the study limits be expanded south to Tamalpais Drive. The Town of Corte Madera particularly took exception to the proposed closure of Madera Blvd. as shown in the alternative and asked that it be re-examined.

## **Current Proposal**

With the passage of Regional Measure 2 in 2004, TAM renewed this effort and in 2006, initiated a process of project development referred to as context sensitive design. During this data driven process, TAM has evaluated information developed in the past and generated a wealth of current information which is being used to evaluate solutions for further consideration. Through this iterative process over twenty improvement options have been considered and through an extensive public outreach process, with frequent presentations given to the City and Town Council's, TAM has refined and screened these options down to two improvement options, one in the northbound direction and one in the southbound direction. A copy of the October 23, 2008 TAM Board report is attached for a more descriptive explanation of the screening process and criteria for selecting the recommended options for further study. Last year's report was a summary of the input and feedback received over the two year development and screening process.

In 2009, the TAM team of staff and consultants worked closely with the Department of Transportation to further analyze the two alternatives as well as exploring an option the Department requested TAM investigate further. TAM continued outreach efforts by hosting a series of stakeholders meetings as well as making presentation to groups such as the Corte Madera Chamber of Commerce. As part of this outreach effort, TAM began to understand the current proposal in the southbound direction was not supported by some stakeholders as previously thought. The northbound option continued to have wide support among the stakeholders.

### The Madera Ramps

TAM has always understood the concerns and sensitive issues surrounding the access to and from the Madera Blvd. on- and off- ramps. The southbound proposal presented to the TAM Board last year had carefully been developed to address the most immediate safety and

operational concerns, specifically the weave at the Sir Francis Drake Blvd southbound onramp and the Lucky/ Fifer off ramp. Phase 1 and Phase 2 improvements southbound address this critical weave, and have been established as a first order of work in this direction. The remaining phase (Phase 3) was developed to address the reconstruction of the Tamalpais Drive Interchange and the associated access ramp system. The TAM team developed an approach that allowed the Phase 3 work to be initially studied as part of the overall southbound solution to establish a "project footprint", without environmentally clearing it for construction purposes, as its cost was beyond foreseeably available funds.

TAM studied numerous solutions for the Phase 3 section (Madera Blvd to Tamalpias Drive). A specific study was authorized and completed for the Town of Corte Madera exploring interchange reconstruction options. As with the previous studies, the engineers determined the close proximity of the Madera Blvd and Tamalpias Drive access ramps do not meet current highway design standards and are considered operationally deficient. Extensive discussions have taken place on this subject with both the local Caltrans office as well as Caltrans leading authorities from their Sacramento offices. They are very clear that efforts to improve the Tamalpias Drive over-crossing and associated access ramps must include addressing the nonconforming ramps at Madera.

With the understanding of the importance the Town placed on continued access to and from Madera Blvd, the team considered such concepts as a braided ramp similar to the proposal just upstream at SFD/ Fifer. This concept was deemed unacceptable due to surrounding impacts such as reducing available parking and acquiring additional rights-of-way. The current concept of frontage roads from Wornum Drive to Madera Blvd. and then to Tamalpias Drive was developed to provide indirect, but equivalent access for users in the area.

It is critical that all of the partners understand that the southbound proposal as a whole does not eliminate the community's access to and from the highway; it only modifies the means by which access is provided. TAM's current studies indicate the proposed Phase 1, 2, and 3 option will result in an improved transportation system (highway, local roads, transit, bike and pedestrian) as compared to the "no build" condition. Studies also indicate that Phases 1 and 2 will provide benefit over the no-build condition, even if Phase 3 is not pursued.

The TAM team has focused a considerable amount of design effort on the southern end of the corridor to determine feasible solutions. During these studies and design efforts, it has been determined Caltrans will not support improvements on the Tamalpias Drive over-crossing and associated ramps without addressing the non-standard ramp condition at Madera Blvd.

### **Upcoming Actions**

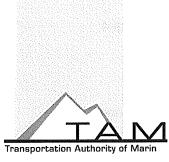
The City of Larkspur is scheduled to consider comments and discuss this project at the November 4<sup>th</sup> Council Meeting. The Town of Corte Madera is scheduled to consider and discuss the project at the November 17<sup>th</sup> Council Meeting. Final comments from both jurisdictions are not available at the time of writing this report. Larkspur comments will be made available during the Executive Committee Meeting. The recommendation of the Executive Committee and the final comments from Larkspur and Corte Madera will be made available to the full TAM Board on November 19<sup>th</sup>.

Staff will continue to coordinate with Caltrans to evaluate all comments received from all parties, including the City of Larkspur and the Town of Corte Madera after the November 30<sup>th</sup> submission deadline.

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Recommendation: Staff recommends that the TAM Board take the following actions relative to the environmental scoping phase: 1) Confirm and consider modifying previous actions of the TAM Board that adopts the conclusion of the Context Sensitive Design efforts, 2) Accept scoping comments from the City of Larkspur and the Town of Corte Madera, and 3) Provide direction to Caltrans on the scope of the environmental document alternatives in response to comments received from the Town of Corte Madera and City of Larkspur.

Attachment: Staff Report October 23, 2008



October 23, 2008

TO:

Transportation Authority of Marin Commissioners

FROM:

Dianne Steinhauser, Executive Director

THROUGH: Bill Whitney, Project Manager

RE:

Highway 101 Greenbrae/ Twin Cities Corridor Improvements - Preliminary

Screening Results. Agenda Item 14

Dear Commissioners:

## **Executive Summary**

Over the past two years, TAM has been engaged in defining necessary improvements in the Highway 101 Greenbrae/Twin Cities Corridor. Last spring the Board received a presentation from staff summarizing an extensive public outreach effort used to develop a set of multi-modal improvement options that address congestion, improvement mobility and increase user safety within the Corridor. The Board considered the improvement options and directed staff to perform additional studies required to screen these options for future consideration.

Based on a comprehensive traffic analysis, estimated costs, general community and Council acceptance, and an initial assessment of environmental concerns, Southbound Improvement Option "C" (Lucky/Fifer Braided Ramp) and Northbound Improvement Option "E" (Wornum Braided Ramp) have been determined to best meet the project goals.

The results of the preliminary screening process have been presented to the Project's Technical Advisory Committee, the TAM Project Sub-Committee, the TAM Executive Committee, the Corte Madera Town Council, the Larkspur City Council and other project stakeholder groups. All parties briefed as part of the outreach efforts are supportive of our approach. During recent meetings with the Department of Transportation (Caltrans) they have expressed support for the screening process but have asked for more details to better understand the pro's and con's of Northbound Improvement Option "D" ( Sir Francis Drake Blvd. Flyover). Staff will continue to coordinate our efforts with Caltrans to provide the information requested as we move forward.

Recommendation: Staff recommends that the TAM Board authorize staff to develop the scope and budget necessary to complete the Project Approval/ Environmental Documentation (PA/ED) Phase, and to adopt the conclusions of the Context Sensitive Design effort that supports Southbound Improvement Option "C" (Lucky/Fifer Braided Ramp) and Northbound Improvement Option "E" (Wornum Braided Ramp) as the preferred improvement options to be carried forward.

## Background

At the April 24, 2008 meeting, the Board directed staff to complete additional studies and further screen the current corridor improvement options under consideration in order to reduce the number of viable candidates to be carried further into the environmental phase. At this meeting staff presented the four corridor improvement options in detail and summarized an extensive 22 month project development process.

The criteria used to evaluate and further screen the remaining four improvement options consist of (1) a comprehensive traffic operational analysis of each option and each potential combination of options, (2) project estimated cost, (3) general community and local Council acceptance and (4) an initial assessment of environmental concerns. Full documentation of the screening process and associated studies will be summarized in the environmental documents as required by CEQA.

## **South Bound Screening**

#### Traffic Operations

While comparing the proposed Option "A" (Frontage Road) with Option "C" (Lucky/ Fifer Braided Ramp) it was determined that based on a comprehensive traffic operational analysis Option "C" performs better for both the local roadway system and the regional highway system. This analysis is based on future forecast condition through the year 2035. The analysis also indicated the Option "A" while providing congestion relief early in the study period causes vehicle delay on the local roadway system in the later years of the study period. For this reason, as well as the operational benefits of Option "C" it is recommended to consider Option "A" as the least desirable option.

### **Estimated Project Cost**

Project costs are very preliminary at this point but both options are estimated to be in a similar range, with Option "A" estimated to be slightly less.

## General Community and Local Council Acceptance

The community expressed interest in both options, but Option "C" (Lucky/Fifer Braided Ramp) was initially considered less desirable to the Town of Corte Madera due to potential impacts to the local roadway system and access issues for surrounding businesses and residential communities. As a result of design modifications as well as developing a phased project approach towards implementation the local Councils are supportive of Option "C".

## Potential Environmental Concerns

The environmental impacts will be studied in much greater detail as part of the next phase. Both options will require similar work on the existing structure crossing the Corte Madera Creek. Option "C" (Lucky/Fifer Braided Ramp) consists of a braided ramp to eliminate traffic conflicts which will result in additional visual impacts. The proposed frontage road between Wornum Drive and Tamalpais Drive will be near adjacent wetlands, future design alignments will take all necessary steps to avoid these areas to the maximum extent possible.

#### **North Bound Screening**

#### Traffic Operations

While comparing the proposed Option "D" (SFD Flyover) with Option "E" (Wornum Braided Ramp) it was determined that based on the traffic operational analysis both options performed well for the regional highway system but Option "E" provides better performance for the local roadway system.

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## **Estimated Project Cost**

Project costs are very preliminary at this point but both options are estimated to be in a similar range, with Option "E" (Wornum Braided Ramp) estimated to be slightly less.

## General Community and Local Council Acceptance

The community expressed interest in both options, but Option "D" (SFD Flyover) was considered less desirable to the City of Larkspur due to the undesirable visual impacts of a new structure over Sir Francis Drake Blvd and the continued and unresolved impacts to the local roadway system.

## Potential Environmental Concerns

The environmental impacts will be studied in much greater detail as part of the next phase. Option "E" (Wornum Braided Ramp) consists of a braided ramp at Wornum Drive which will result in additional visual impacts. Option "D" (SFD Flyover) will create a new vehicle crossing of Sir Francis Drake Boulevard to eliminate traffic conflicts which will result in additional visual impacts. Option "D" will require significant work to the existing structure over Corte Madera Creek which may result in potential impacts to the marine environment.

## Phased Approach

Based on the above assessment the SB Option "C" (Lucky/Fifer Braided Ramp) and the NB Option "E" (Wornum Braided Ramp) provide the best overall performance to meet the project goals. However concerns expressed over Option "C" do not meet our criteria of general community and local council acceptance. It is proposed that a phased approach towards the implementation of the SB Option "C" be considered to systematically improve the sub-standard conditions along the highway corridor. The design team has proposed a SB Option "C" Phase 1 that will address the current merge/weave conflict that currently exists on the highway in the area of the Sir Francis Drake Blvd on-ramp and the Lucky/Fifer off-ramp. SB Option "C" Phase 2 will address future traffic volumes by building the braided onramp and off-ramp in the vicinity of Lucky/Fifer, and SB Option "C" Phase 3 will complete the SB improvements by addressing the current merge/weave conflict that currently exists on the highway in the area of Madera Blvd and Tamalpias Drive. Phase 3 includes the re-construction of the Tamalpais Drive overcrossing (See attachments for further details)

# **Phased Environmental Approach**

The combination of SB Option "C" (Lucky/Fifer Braided Ramp), as phased, and NB Option "E" (Wornum Braided Ramp) is estimated to cost more than the current funding will allow completing all the improvements as proposed. The design team is recommending a "hybrid" approach towards completing and obtaining the project approvals and the environmental determination that will allow the project to proceed. Both NEPA and CEQA require all improvements are addressed to include both immediate impacts of the constructable units as well as any cumulative impacts of the ultimate project improvements. This process will establish the plan line of the ultimate project and consider the full impacts to the entire corridor. This will be followed by a project specific determination for those elements that have identified funding and will eventually be built. The constructable units will demonstrate logical termini and establish independent utility. Because funding is limited, only the fundable projects will have a final environmental determination allowing them to go forward into the construction phase

### **Recent Outreach Efforts**

The results of the preliminary screening process have been presented to the Project's Technical Advisory Committee, the TAM Project Sub-Committee, the TAM Executive Committee, the

Corte Madera Town Council, the Larkspur City Council and other project stakeholder groups. All parties briefed as part of the outreach efforts are supportive of our approach. During recent meetings with the Department of Transportation (Caltrans) they have expressed support for the screening process as described above but have asked for more details to better understand the pro's and con's of Northbound Improvement Option "D" (Sir Francis Drake Blvd. Flyover). Staff will continue our coordination efforts with Caltrans to provide the information requested as we move forward.

#### Next Steps

With Board approval, staff will work with our consultants to develop the scope and budget required to complete the Project Approval/ Environmental Documentation (PA/ED).

Staff intends to bring an item before the Board next month that will update our Regional Measure 2 Initial Project Report and amend our contract for additional engineering and environmental service.

Recommendation: Staff recommends that the TAM Board authorize staff to develop the scope and budget necessary to complete the Project Approval/ Environmental Documentation (PA/ED) Phase, and to adopt the conclusions of the Context Sensitive Design effort that supports Southbound Improvement Option "C" (Lucky/Fifer Braided Ramp) and Northbound Improvement Option "E" (Wornum Braided Ramp) as the preferred improvement options to be carried forward.

Attachments: Improvement Option Schematics

ACTION OF BOARD ON October 23, 2008	
APPROVED AS RECOMMENDED <u>Yes</u>	
ACTION REJECTED	
APPROVED WITH MODIFICATIONS/CONDITIONSN/A (Describe modifications and/or conditions below)	
	<u> </u>
VOTE OF COMMISSIONERS	
AYES:	Commissioners: Adams, Arnold, Kinsey, Moulton-Peters, Cock, Donnell, Lundstrom, Breen Skall, Albritton, Dillon-Knutson
NOES:	Commissioners: Maggiore
ABSTENTIONS:	Commissioners:
I hereby certify that this is a true and correct reflection of an action taken and entered into the minutes of the Board of Directors on the date shown.	
ATTESTED Clerk to TAM	